

140 WEST FLAGLER STREET, SUITE 1603 MIAMI, FLORIDA 33130-1563 (305) 375-2901 FAX (305) 375-2908

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

Groff Metals of Florida, Inc. 12847 N.W. 45th Avenue Opa-Locka, Florida 33054

Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Aluminum Slatted Awning Shutter

APPROVAL DOCUMENT: Drawing No. 05-077, titled "Hurricane Awning", sheets 1 through 7 of 7, prepared by Tilteco, Inc., dated April 25, 2005, last revision #1 dated April 25, 2005, signed and sealed by Walter A. Tillit Jr., P.E., on June 03, 2005, bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 05-0817.10 and consists of this page 1, evidence submitted pages E-1, E-2, & E-3 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

NOA No. 07-0322.09
Expiration Date: 08/01/2012
Approval Date: 07/19/2007
Page 1 NOA No. 07-0322.09

Gruff Metals of Florida, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #97-0916.04

A. DRAWINGS

1. Drawings prepared by Groff Metals of Florida, Inc. titled "Hurricane Awning", Drawing No. 97-212, Sheets 1 to 6 of 6, dated 08/04/97 with no revisions signed and sealed by W. A. Tillit Jr., PE

B. TEST

- 1. Exterior Elevation Case 1: Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of awning shutter prepared by Miami Testing Laboratory, Inc., Report No. MTL-16188, dated 12/12/94, signed and sealed by D. G. Ober, PE.
- 2. Exterior Elevation Case II: Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of awning shutter prepared by Construction Testing Corporation, Report No. CTC-96026, dated 07/16/96 signed and sealed by C. G. Tyson, P.E.

C. CALCULATIONS

- 1. Anchor analysis and calculations, dated 01/10/95, pages 1 through 3 of 3 prepared by Tilteco, Inc., signed and sealed by W. A. Tillit Jr., PE.
- 2. Anchor analysis and calculations, dated 07/22/96, pages 1 though 5 of 5, prepared by Tilteco Inc, signed and sealed by W. A. Tillit Jr. PE.

D. MATERIAL CERTIFICATION

- 1. Mill Certified Inspection Report issued by Alsco/Hastings Building Products, dated 05/01/95 with chemical composition and physical properties of aluminum alloy 3105-H14.
- 2. Certified Tensile Test Report No. MTS 257151-A, sheet aluminum sample 16256, prepared by Center For Applied Engineering, Inc. Material Testing Services, dated 12/22/94 per ASTM E8-93, signed by R. G. Miller, PE.
- 3. Mill Certified Inspection Report issued by Groff Metals of Florida, dated 05/12/97 with chemical composition and physical properties of aluminum alloy 3105-H14
- 4. Certified Tensile Test Report No QCM Job # 6FM-1559, sheet aluminum samples CTC-96-026-A-Out and CTC-96-026-A-In, prepared by QC Metallurgical Inc. dated 06/24/96, per ASTM E8-93, signed and sealed by F. G. Grate PE.

E. STATEMENTS

1. Manufacturer/Private Labeler Agreement, prepared by Re-Col Enterprises, dated 08/13/97 signed by Antonio L. Requejo and Notarized by G. E. Rojas.

Helmy A. Makar, P.E., M.S. Product Control Examiner

NOA No. 07-0322.09 Expiration Date: 08/01/2012

Approval Date: 07/19/2007

Gruff Metals of Florida, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #99-0623.03 2.
- A. **DRAWINGS**
 - 1. None.
- B. TESTS
 - None. See previous approval number 97-0916.04.
- C. **CALCULATIONS**
 - None. See previous approval number 97-0916.04.
- **MATERIAL CERTIFICATIONS** D.
 - None. See previous approval number 97-0916.04. 1.
- Ε. **STATEMENTS**
 - Letter by Groff Metals of Florida, Inc., dated June 15, 1999, signed by Ms. Luisa M. Requejo certifying that the product has not changed.
 - Letter by Tilteco Inc., dated June 15, 1999, signed and sealed by Walter A. Tillit Jr., P.E., certifying that he is still in the engineering business.
- EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #02-0611.01 3.
- A. **DRAWINGS**
 - Drawing No. 02-393, titled "Hurricane Awning", sheets 1 through 7 of 7, prepared 1. by Tilteco, Inc., dated July 30, 2002, sign and sealed by Walter A. Tillit, Jr. P.E.
- В. **TESTS**
 - 1. None.
- C. **CALCULATIONS**
 - 1. None.
- **MATERIAL CERTIFICATIONS** D.
 - None.
- E. **STATEMENTS**
 - Letter by Groff Metals of Florida, Inc., dated August 20, 2002, signed by Ms. Elsa M. Geilin.

Product Control Examiner

NOA No. 07-0322.09

Expiration Date: 08/01/2012 Approval Date: 07/19/2007

Gruff Metals of Florida, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #05-0817.10

A. DRAWINGS

1. Drawing No. 05-077, titled "Hurricane Awning", sheets 1 through 7 of 7, prepared by Tilteco, Inc., dated April 25, 2005, last revision #1 dated April 25, 2005, signed and sealed by Walter A. Tillit Jr., P.E.

B. TEST

1. None.

C. CALCULATIONS

1. Anchor analysis and calculations, dated April 25, 2005, pages 1 through 23 of 23 prepared by Tilteco, Inc., signed and sealed by W. A. Tillit Jr., P.E.

D. QUALITY ASSURANCE

1. By Miami-Dade County Building Code Compliance Office.

E. MATERIAL CERTIFICATION

1. None.

F. STATEMENTS

1. Letter by Tilteco Inc., dated June 06, 2005, signed and sealed by Walter A. Tillit Jr., P.E., certifying that drawings 05-077 are in compliance with the Florida Building Code 2004 Edition.

5. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. None.

B. TEST

1. None.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

1. By Miami-Dade County Building Code Compliance Office.

E. MATERIAL CERTIFICATION

1. None.

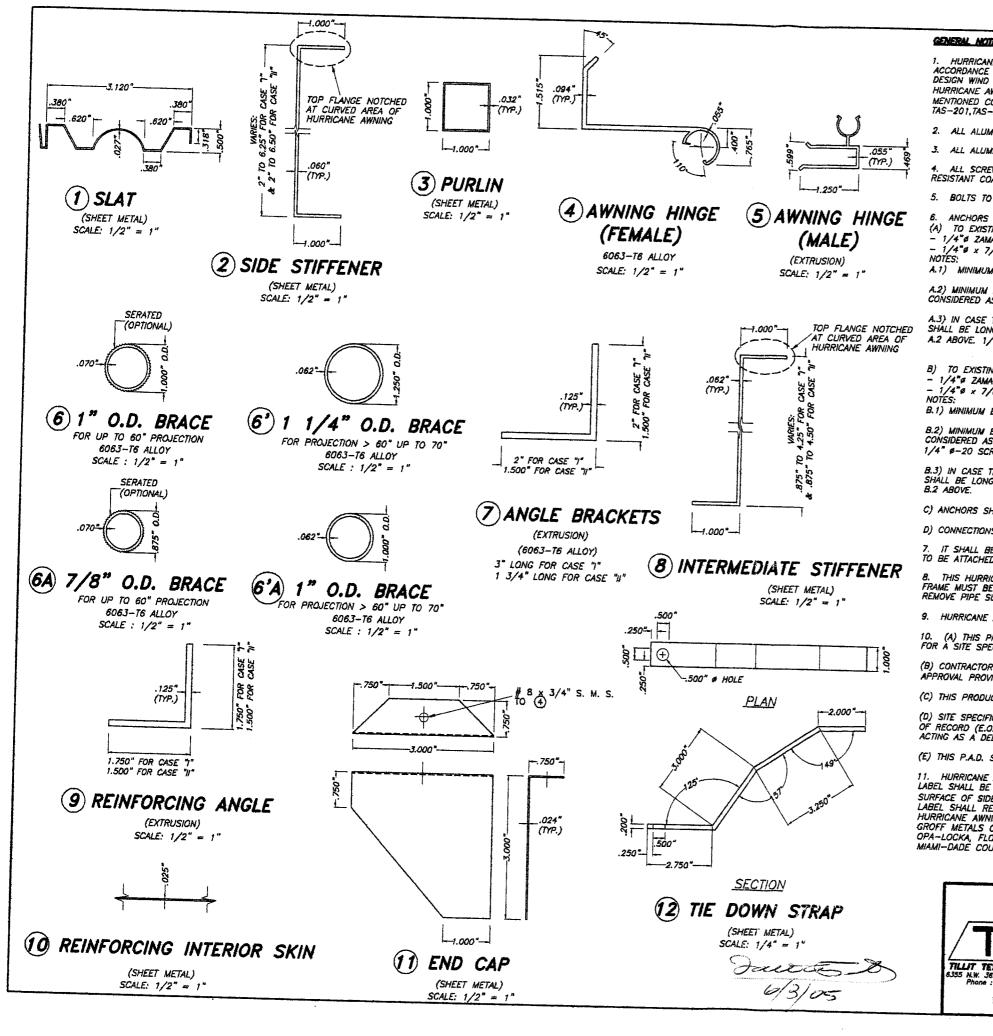
F. STATEMENTS

1. Letter by Tilteco Inc., dated March 20, 2007, signed and sealed by Walter A. Tillit Jr., P.E., certifying that he continues in the engineering business.

Hermy A. Makar, P.E., M.S. Product Control Examiner

NOA No. 07-0322.09 Expiration Date: 08/01/2012

Approval Date: 07/19/2007



CENERAL NOTES:

- 1. HURRICANE AWNING SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE.

 BUSING WIND LOADS HAVE BEEN DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE.

 HURRICANE AWNING'S ADEQUACY FOR WIND AND IMPACT LOAD HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.4 OF THE ABOVE MENTIONED CODE AS PER MIL LAB REPORT # 16188 (FOR CASE I) AND CTC LAB REPORT # 96-026 (FOR CASE II), PER PROTOCOLS
- 2. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 ALLOY (UNLESS OTHERWISE NOTED).
- 3. ALL ALUMINUM SHEET METAL TO BE 3105-H14 ALLOY.
- 4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 SERIES WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018.
- 5. BOLTS TO BE 2024-T4 ALUMINUM ALLOY, GALVANIZED OR STAINLESS STEEL WITH 36 ksi MINIMUM YIELD STRENGTH.
- 6. ANCHORS TO WALL SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED)
- (A) TO EXISTING POURED CONCRETE:
- 1/4" ZAMAC NAILIN, AS MANUFACTURED BY POWER FASTENERS, INC. - 1/4" x 7/8" POWER CALK-IN, AS MANUFACTURED BY POWER FASTENERS, INC.
- A.1) MINIMUM EMBEDMENT OF 1/4" ZAMAC NAILIN ANCHORS IS 1 3/4".
- A.2) MINIMUM EMBEDMENT OF 1/4" x 7/8" POWER CALK-IN INTO POURED CONCRETE IS 7/8", NO EMBEDMENT INTO STUCCO SHALL BE CONSIDERED AS PART OF THE REQUIRED EMBEDMENT.
- A.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES A.1 AND A.2 ABOVE. 1/4" \$-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
- B) TO EXISTING CONCRETE BLOCK WALL:
- 1/4" ZAMAC NAILIN, AS MANUFACTURED BY POWER FASTENERS, INC.
- 1/4" 8 x 7/8" POWER CALK-IN, AS MANUFACTURED BY POWER FASTENERS, INC.
- B.1) MINIMUM EMBEDMENT OF 1/4" ZAMAC NAILIN ANCHORS INTO CONCRETE BLOCK UNIT SHALL BE 1 1/8".
- B.2) MINIMUM EMBEDMENT OF 1/4" x 7/8" POWER CALK-IN INTO CONCRETE BLOCK IS 7/8", NO EMBEDMENT INTO STUCCO SHALL BE CONSIDERED AS PART OF THE REQUIRED EMBEDMENT. 1/4" \$-20 SCREWS USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST.
- B.3) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES B.1 AND
- C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- D) CONNECTIONS INTO WOOD FRAME BUILDINGS SHALL BE PERFORMED AS PER DETAILS SHOWN ON SHEET 6.
- 7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE HURRICANE AWNING IS
- 8. THIS HURRICANE AWNING SHALL ONLY REMAIN OPENED FOR SUSTAINED WIND SPEEDS UP TO 74 m.p.h. EACH HURRICANE AWNING FRAME MUST BE PERMANENTLY LABELED WITH A WARNING NOTE STATING THAT TO SECURE HURRICANE AWNING IN A CLOSED POSITION, REMOVE PIPE SUPPORTS, FOLD HURRICANE AWNING DOWN, AND FASTEN ANGLE BRACKETS AND TIE DOWN STRAPS TO EXISTING WALL.
- 9. HURRICANE AWNING SHALL ONLY BE INSTALLED AT ELEVATIONS MEASURED AT TOP OF AWNING UP TO 15'-0" RESPECT TO GRADE.
- 10. (A) THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.A.D.
- (B) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
- (C) THIS PRODUCT APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.
- (D) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (E) THIS P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER THAT PREPARED IT. HURRICANE AWNING MANUFACTURER'S PRODUCT REVISED
- LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF SIDE STIFFENER (COMPONENT 2). LABEL SHALL READ AS FOLLOWS: HURRICANE AWNING GROFF METALS OF FLORIDA, INC. OPA-LOCKA, FLORIDA MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

PRODUCT RENEWED as complying with the Florida **Buiding Code**

as complying with the Florida **Buiding Code**

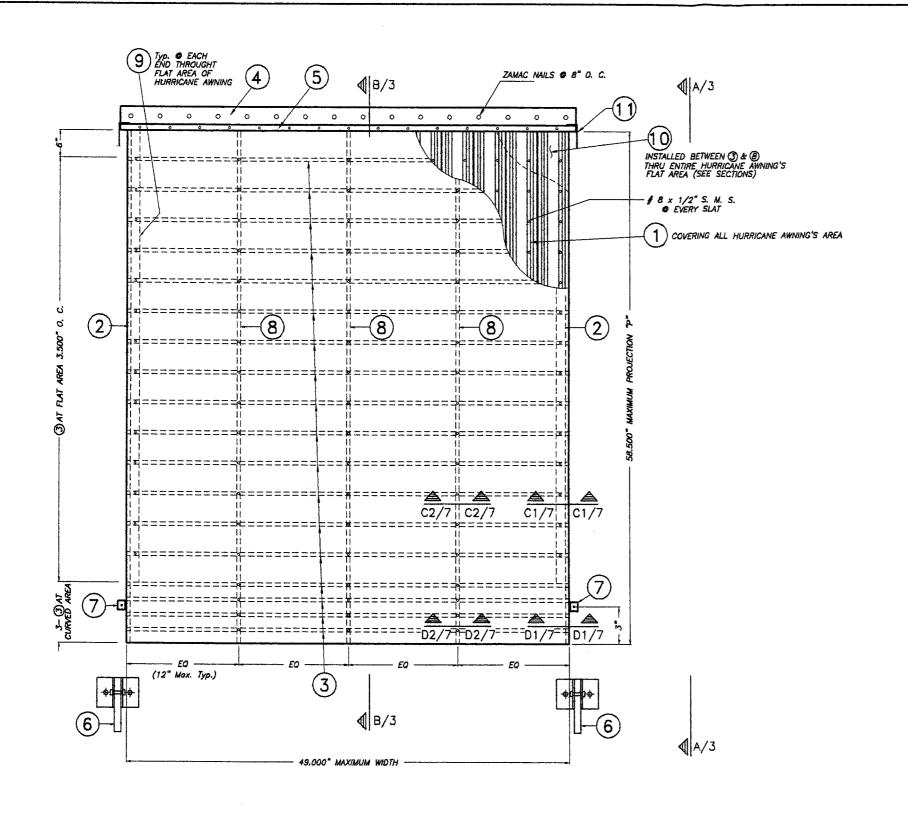
SHEET 1 OF 7

Acceptance No 07-03 22.09 Acceptance No 05 - 08 17. 10 Expiration Date OR/01/40, Expiration Date 08/01/2007

By Helme Mari Dade Product Control uni Dade Product Control Division C. (High Velocity Hurricane Zone)



HURRICANE AWNING AS SHOWN SCALE GROFF METALS OF FLORIDA, INC. 4/25/05 DATE 12847 N. W. 45th. AVENUE OPA-LOCKA, FLORIDA 33054 05-077 REV. No DESCRIPTION DATE REV. No DRAWING No 1 OLD 02-393 4/25/05 3



PRODUCT RENEWED as complying with the Plorkin

Buiding Code Acceptance No 07-0322.09
Expiration Date 08/01/2012

Division

PRODUCT REVISED as complying with the Florida

Buiding Code

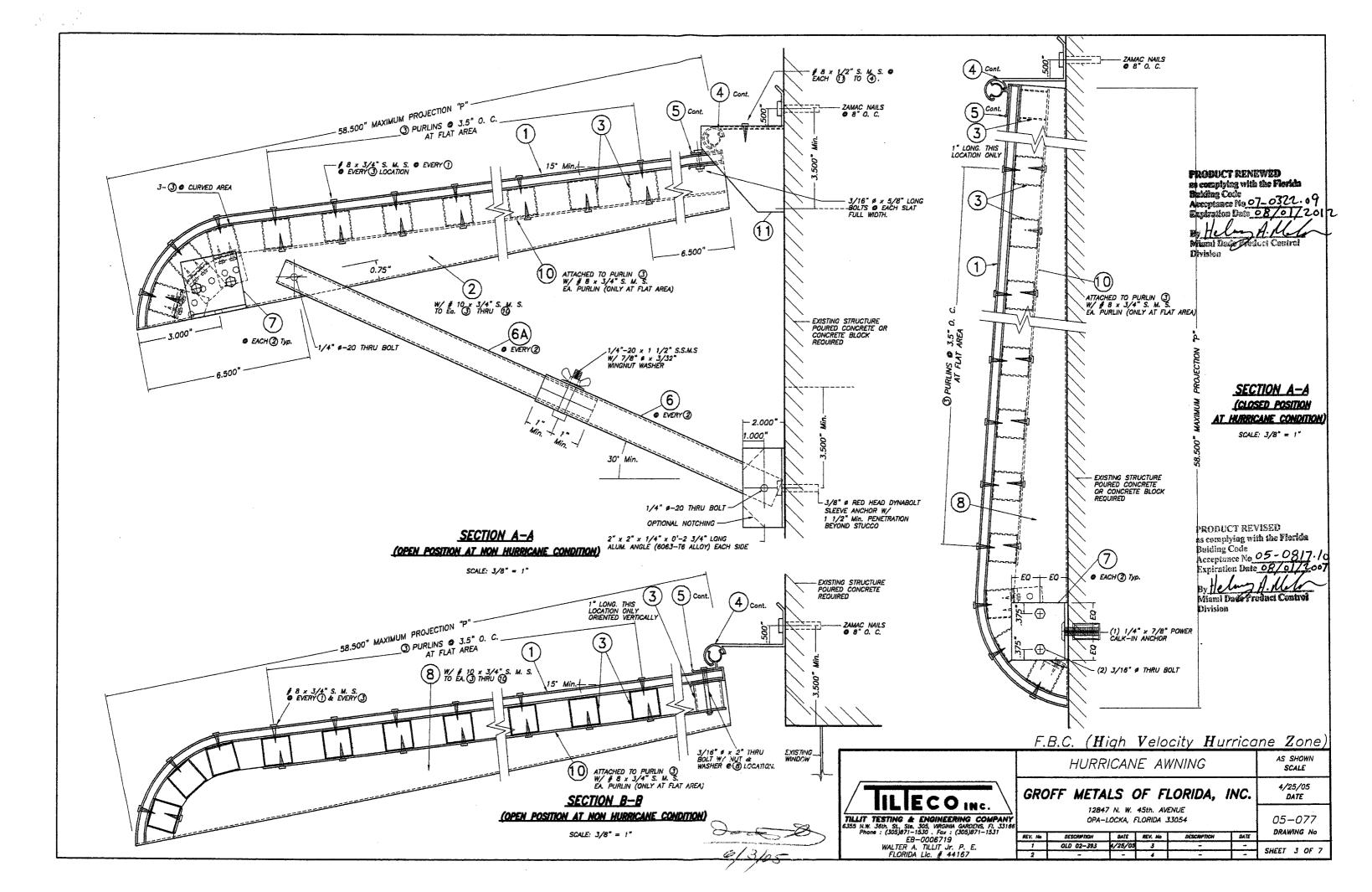
Acceptance No 05-08/7.10 Expiration Date 08/01/2007

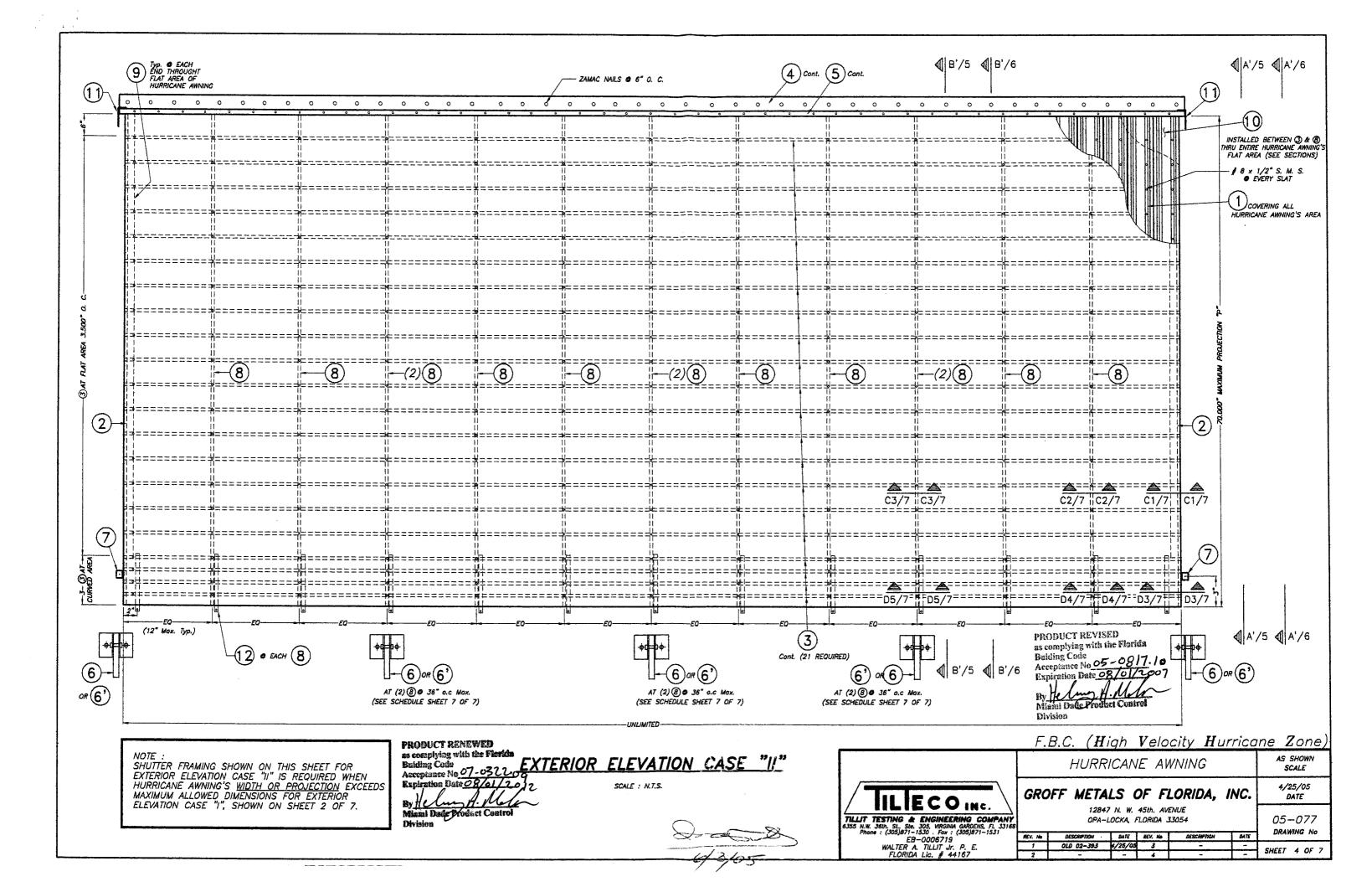
Division

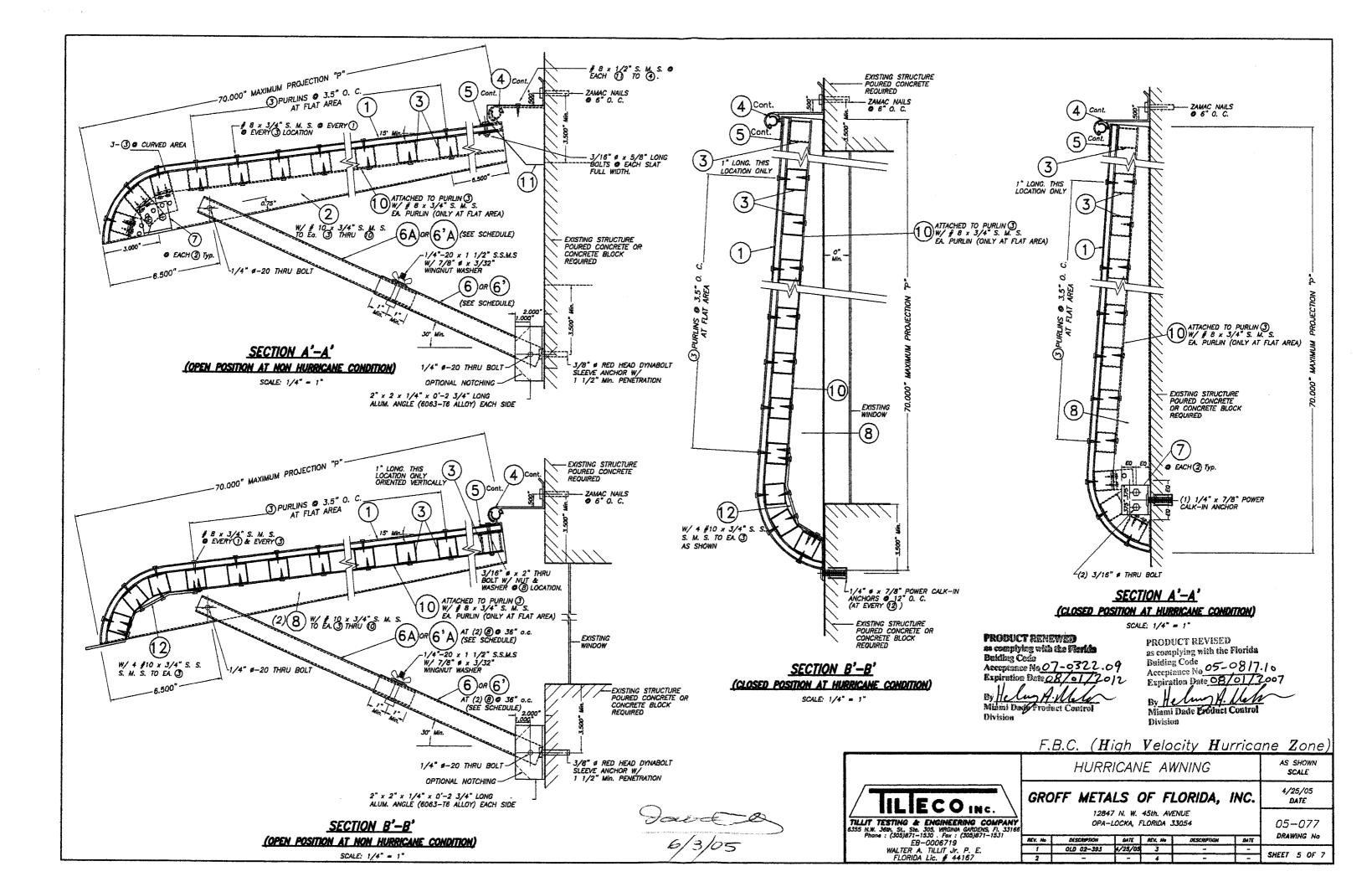
EXTERIOR ELEVATION CASE "I"

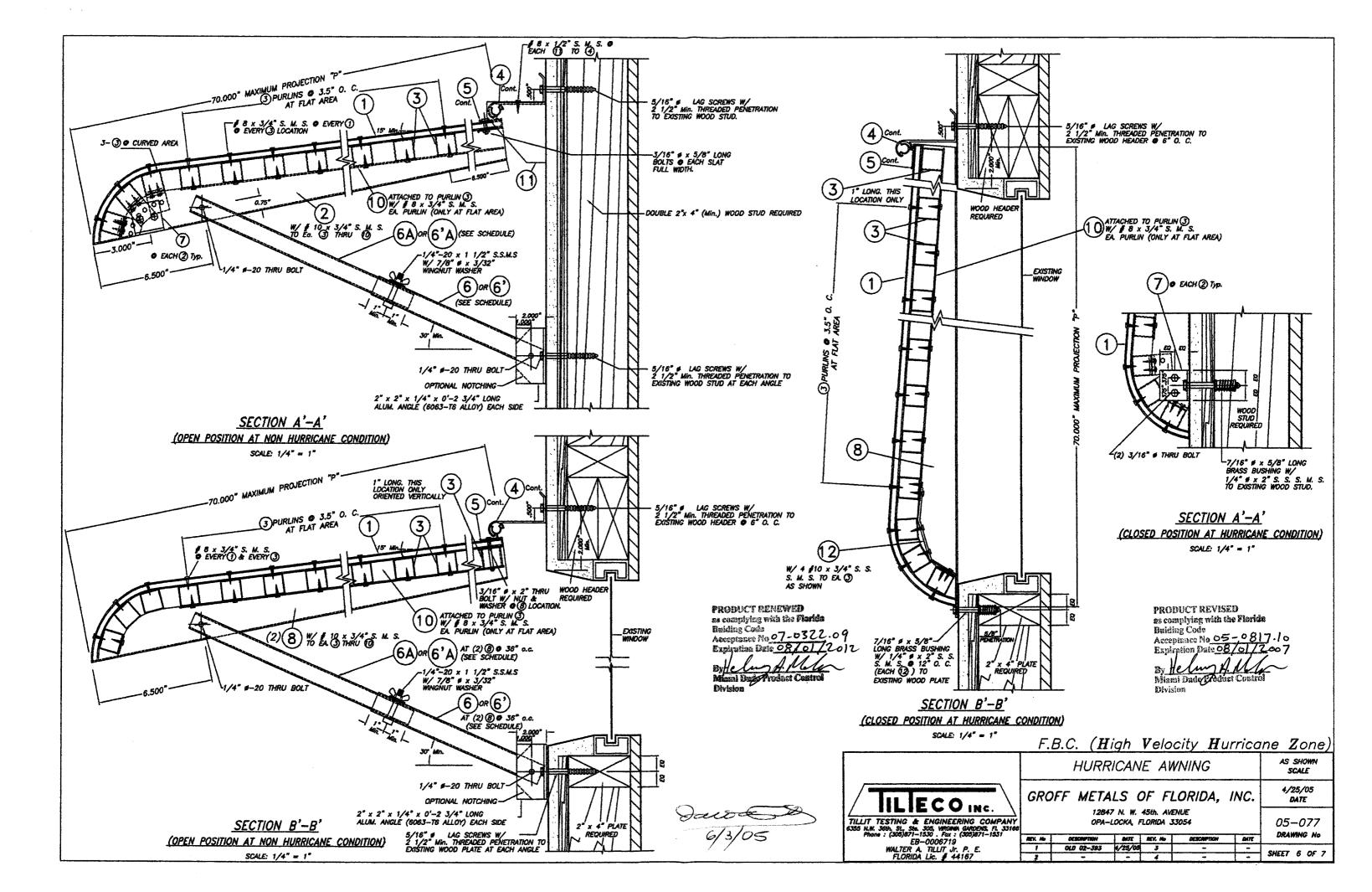
SCALE : N.T.S.

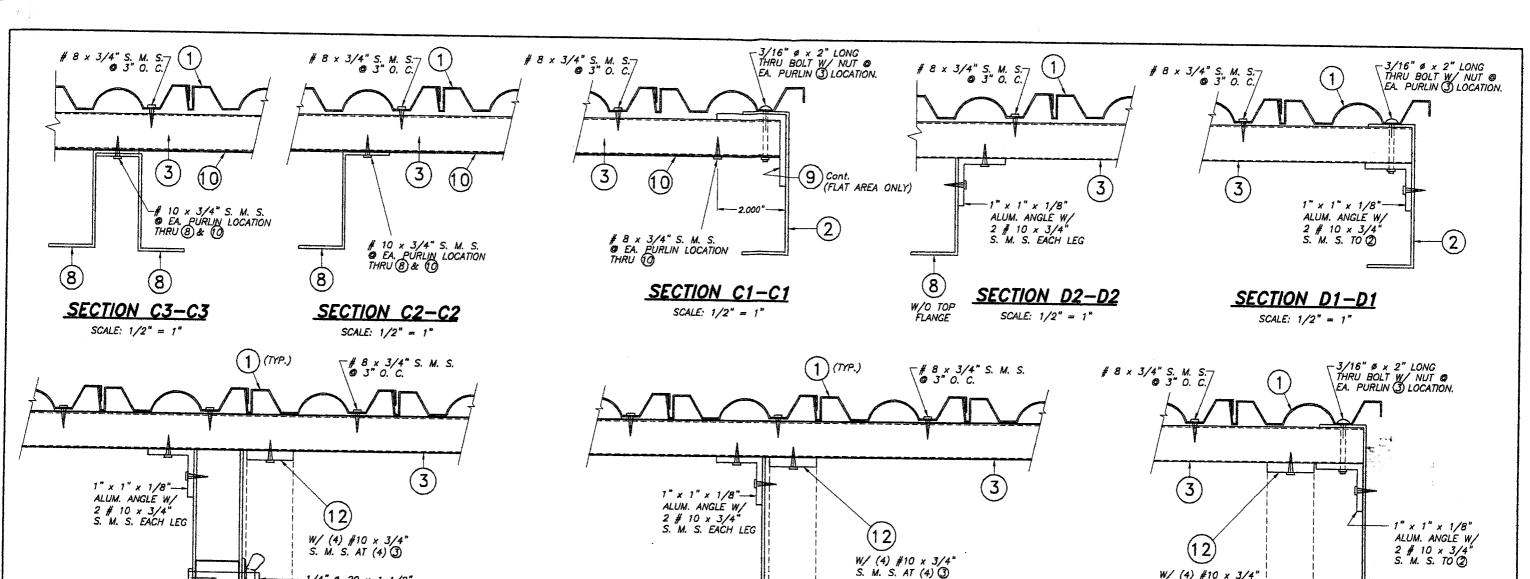
F.B.C. (High Velocity Hurricane Zone) AS SHOWN HURRICANE AWNING SCALE 4/25/05 GROFF METALS OF FLORIDA, INC. IL ECO INC. DATE 12847 N. W. 45th. AVENUE TILLIT TESTING & ENGINEERING COMPANY 6355 N.W. JSth. St., Ste. 305, VIRGINIA GARDENS, FI. J3166 Phone: (305)871-1530 . Fox: (305)871-1531 WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167 OPA-LOCKA, FLORIDA 33054 05-077 DRAWING No REV. No BESCRIPTION DATE REV. No. 1 OLD 02-393 4/25/05 3 SHEET 2 OF 7











SECTION D4-D4 SCALE: 1/2" = 1"

8

W/O TOP

SECTION D5-D5 SCALE: 1/2" = 1"

8

W/O TOP

FLANGE

8

W/O TOP

FLANGE

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM SPAN SCHEDULE

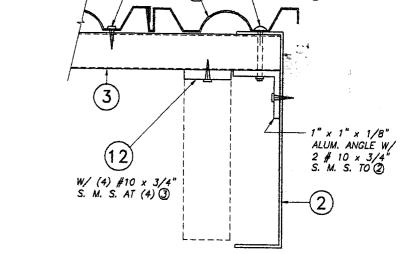
1/4" ø-20 x 1 1/2"

-6A)OR 6'A) AT (2) (8) @ 36" a.c. Max. (SEE SCHEDULE)

THRU BOLT W/ 7/8" Ø x 3/32" WINGNUT WASHER

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM SHUTTER DIMENSIONS	APPLICABLE ELEVATION CASE AND SUPPORTING STRUCTURE CONDITIONS	MINIMUM REQUIRED SEPARATION TO GLASS	BRACE REQUIREMENTS		
+50.0, -67.0	Max. WIDTH = 49" Max. PROJECTION "P" = 58.5"	I (SHEET 2 OF 7) SHUTTER INSTALLED ONLY INTO C. B. S. BUILDING	NONE REQUIRED	6, 6A		
+50.0, -55.5	Max. WIDTH = UNLIMITED Max. PROJECTION "P" = 70"	II (SHEET 4 & 5 OF 7) SHUTTER INSTALLED INTO C. B. S. OR WOOD FRAME BLDGS.	NONE REQUIRED	6, 6A) FOR "P" < 60" 6'), 6'A) FOR "P" ≥ 60" UP TO 70"		

Doco 3/05



SECTION D3-D3 SCALE: 1/2" = 1"

PRODUCT RENEWED as complying with the Mortda Building Coils Acceptance No 07-0322.09 Experime Date 08/01/2012

Miletal Deep Product Control

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 05 - 0 817.10 Expiration Date 08/01/2007

By Helm H.M. W Mismi Dade Coduct Control Division

F.B.C. (High Velocity Hurricane Zone)

	HURRICANE AWNING						
TILIECO INC.	4/25/05 DATE						
LIT TESTING & ENGINEERING COMPANY I N.W. JEUT. SL., SUG. 305, VIRGIMA GARDENS, FI. 33166 Phone : (305)871-1530 FOX: (305)871-1531 EB-0008719 REV. No. DESCRIPTION DATE REV. No. DESCRIPTION DATE							05-077 DRAWING No
WALTER A. TILLIT Jr. P. E. FLORIDA Lic. # 44167	1 2	OLD 02-393	4/25/05	3	-	<u> </u>	SHEET 7 OF 7